(b) no blame but also no accountabil-
ity? Clearly, there must a third choice.
And there is. It involves developing a
culture in which people take responsi-
bility. The mindset of “taking respon-
sibility” is very different from that of
blaming. The person who takes respon-
sibility has learned to ask himself or
herself important questions: What is
my contribution to the outcome we
achieved? Specifically, what did I do
or not do and say or not say that con-
tributed to this result? As part of this
inquiry, I may ask colleagues or clients
for feedback, but my primary motiva-
tion is learning how my behavior con-
tributed to the outcome. I avoid the all-
too-tempting trap of pointing the finger
at others. In this view of the world,
accountability resurfaces in four ways.

First, individual and team goals are
made explicit so that one can mea-
sure exactly whether the goals are met.
Second, when individuals or teams fall
short of a goal, feedback is the first
action of accountability. Team mem-
bers are made aware of shortfalls, not
in a blaming way but in a factual way
relative to the goals. In high-perform-
ing firms, this first step—feedback—is
the approach that is used most often.
It will address and resolve most of the
performance issues. Obviously, skill in
providing feedback is important.

Third, when feedback does not work,
the reward system (bonuses, promo-
tions, etc.) kicks in. Employees who
are unable to raise their performance
receive fewer rewards—again, without
blame attached.

Finally, if explicit goals, proper feed-
back, and rewards do not resolve the
performance issue, it may mean there
is a problem with job fit. The employee
is in the wrong job. Still avoiding either
blaming or shaming, the manager may
need to discuss what a better job fit
would look like, whether within the
firm or elsewhere.

The critical thing to understand is
that blame has been “outed” as one of
the major causes of dysfunction and fail-
ure for investment firms. Blame creates
a fearful, cover-your-backside culture.
Employees become less open, less trust-
ing, and less effective. The antidote to
blame is taking responsibility, owning
our behavior, holding the mirror up to
ourselves, and (when appropriate) pro-
viding skillful feedback (not blaming)
to our colleagues. Firms that do these
things well all report that establishing
the right culture takes a while. Blame is
deep seated in our psyches and takes a
conscious effort to root out. But it can
be done, with great benefits for all.

Jason Hsu is co-founding principal and chief
investment officer with Research Affiliates. Jim
Ware, CFA, is founder of Focus Consulting Group
(FCG). Chuck Heisinger at FCG was instrumental
in providing FCG data to Jason Hsu for the white
paper on which this article is based.

---

Read Your Sharpe and Markowitz!
MODERN PORTFOLIO THEORY IS AN INDISPENSABLE TOOL FOR INVESTORS

By Laurence B. Siegel

In Jerome Lawrence and Robert Lee’s
classic play Inherit the Wind, based on
the 1925 “monkey trial” in which John
Scopes was accused of violating Ten-
nessee law by teaching evolution, cre-
ationists rally support for their cause
by displaying a banner saying, “Read
Your Bible!” Henry Drummond, lawyer
for the defendant, wishes there were
also a banner proclaiming “Read Your
Darwin.” If you’re going to argue for a
cause, Drummond seems to be saying,
you’d better know it backward and for-
ward. And if you’re going to try to over-
turn somebody else’s views, you’d better
understand those views even better
than your opponent does!

For the same reason, I’ll argue that
the great innovations of William Sharpe
and Harry Markowitz, and the other
creators of classic finance theory in
the 1950s and 1960s, are worth study-
ing very closely—even though some of
their findings aren’t exactly right. Clas-
sic finance forms a base case or null
hypothesis against which empirical
facts, new theories, and conjectures can
be tested. Without it, we are lost. With
it, we have a set of very useful guide-
posts, a little like Newtonian mechan-
ics in physics—we know it’s not exactly
right but use it where we can because
it is so useful. We need to read our
Sharpe and Markowitz.

WHAT’S THE MATTER WITH
FINANCE TODAY?
The current state of knowledge in
finance (and particularly investment
management) is confusing not only to
many newcomers but also to some of
us who have been in the business for
decades. The efficient market hypoth-
esis (EMH), a cornerstone of classic
finance theory, says that security prices
reflect all available information and that
it’s impossible to beat the market consis-
tently. The EMH is on the ropes. Most
finance practitioners make their living
by violating it. They find inefficien-
cies in the market and exploit them—
for themselves and for their custom-
ers—and charge high fees for doing so.
This would be impossible if the market
was actually as efficient as academ-
ics believed it was a few decades ago.

The related capital asset pricing model
(CAPM) and the portfolio selec-
tion technique known as Markowitz
optimization are also facing challenges.
A large body of evidence shows that
the CAPM is not exactly right. It does
not give very good forecasts of security
returns, conditional on knowing what the market return is. Low-risk (low “beta”) securities seem to beat high-risk ones even though CAPM predicts the opposite. Markowitz optimization, which is a way of putting numbers around the long-established practice of diversification, has been blamed for the failure of diversified portfolios to perform well in the crash of 2008.

Meanwhile, in Sweden, the Nobel Prize committee has added to the confusion by splitting the 2014 Nobel Prize in Economics between Eugene Fama, a leading advocate of the EMH, and Robert Shiller, who has devoted much of his career to overturning it. (Lars Hansen, an econometrician whose work has formed the foundation for much of the recent testing of theories in finance, also shared the prize.) Is the Nobel committee saying that both Fama and Shiller are right and that the EMH is valuable and so is the body of research casting doubt on it?

You bet. That’s exactly what they’re saying. But you might be wondering how two contradictory propositions can both be right.

WHAT’S A THEORY?
We’re most accustomed to hearing the word “theory” used in connection with the natural or physical sciences: the theory of gravity, theory of evolution, and so forth.

In the “hard” sciences, according to the American Association for the Advancement of Science, a scientific theory is a well-substantiated explanation of some aspect of the natural world, based on a body of facts that have been repeatedly confirmed through observation and experiment. Such fact-supported theories are not “guesses” but reliable accounts of the real world. The theory of biological evolution is more than “just a theory.” It is as factual an explanation as the theory of matter or the germ theory of disease. Our understanding of gravity is still a work in progress. But the phenomenon of gravity, like evolution, is an accepted fact.

(Quoted from “The Scientific Method” at chemwiki.ucdavis.edu, accessed on 14 July 2014.) In this context, EMH is merely a hypothesis, not a fully developed theory. It is testable and, when we test it in detail, we find it wanting. Markets are not perfectly efficient. In spite of this shortcoming, EMH is a valuable hypothesis because it focuses our attention on what a perfectly efficient market would look like and how real markets differ from that ideal. As Thomas Coleman, a professor at Johns Hopkins University and the author of A Practical Guide to Risk Management (published by the CFA Institute Research Foundation in 2011) and Quantitative Risk Management, writes, “EMH is powerful not so much because it is right or wrong—but rather because it (1) reminds us that generating alpha is hard (markets are not grossly inefficient) and (2) pushes us to ask where, why, and by how much markets are inefficient.” (Quoted from a personal communication with the author. This article was critically reviewed by Professor Coleman, a longtime friend and occasional collaborator.)

If EMH is an imperfect yet valuable hypothesis, modern portfolio theory (MPT) rises to the level of an invaluable theory. I define MPT broadly as a collection of major propositions in finance starting with Markowitz optimization (1952) and ending with Black–Scholes–Merton option pricing (1973). If the elements of MPT are broadly construed and enumerated (in no particular order), we will get the seven great ideas of modern finance: (1) dividend or cash-flow discounting (asset price as a present value), (2) interest rate expectations hypothesis, (3) no-arbitrage condition, (4) market efficiency, (5) portfolio efficiency (mean-variance optimization and related concepts), (6) CAPM (relation between correlated risk and expected return), and (7) optionality and option pricing.

A strong candidate for an eighth great idea is arbitrage pricing theory (mapping security returns into multiple factors). And if we want to be ecumenical and bring in corporate finance, we might also include two other propositions: capital structure indifference and dividend indifference.

This is a pretty powerful body of knowledge. (From this point forward, I’m going to use “MPT” as shorthand for the whole list.) It is integrated. The parts fit, with each proposition consistent with all the others. It is testable and falsifiable. But the evidence for major parts of it, particularly market efficiency and the CAPM, doesn’t rise to the standard of “overwhelming evidence.” There are major doubts. So what is it useful for?

MPT’s propositions are useful as a null hypothesis and point of departure.

Take, for example, the CAPM. The CAPM says what the return on a security should be, given the market return, the riskless rate, and the beta or correlated risk of the security. We know that the actual return on the security will differ from the CAPM’s prediction. We call the excess return “alpha,” and we credit the manager who picked that security with skill if the alpha is positive at a statistically significant level.

We know, then, that the CAPM cannot be exactly right because if it were, all alphas would be zero (on average over time). There would be no manager skill to measure. But we also need the CAPM to provide the benchmark for measuring the managers whose ability to generate alpha has invalidated the CAPM!

In other words, the null hypothesis, what we should believe for the time being until the data convince us otherwise, is that the market is efficient and the CAPM gives accurate forecasts. This is what a manager asserting skill seeks to disprove, and our bias should be to require quite a lot of evidence. The return forecast given by the CAPM is also the point of departure for an inquiry into whether a manager has earned an alpha that is (1) positive, (2) statistically different from zero, and (3) sustainable or repeatable. If a manager doesn’t pass those tests, he or she can be judged as
having delivered the return that the CAPM predicted and that could therefore be earned by combining a market index fund and a long or short position in the riskless asset (without paying the manager for any value added).

Without the CAPM, we wouldn’t be engaging in scientific performance measurement. We’d be saying, “This return seems pretty good. It’s better than what Steve at the country club got.” There would be no thought of levering the market return up or down to create a neutral, objective benchmark.

The other propositions in the list are similar. They’re not universal truths, but are neutral base cases or starting points for an investigation.

So, Eugene Fama is right that the EMH is a vitally important concept against which all claims of market inefficiency or alpha generation can and should be tested. Robert Shiller is right that the EMH fails the test much more often and, more convincingly, than can be accounted for by accident and random variation; the market really isn’t perfectly efficient. (See also a very valuable article by Cliff Asness and John Liew, “The Great Divide over Market Efficiency,” Institutional Investor [3 March 2014].)

JUDGING MPT TOO HARSHLY?
So far, we’ve been evaluating MPT and its components as scientific theories, and they have fallen somewhat short. But economics is not a natural science. It’s a social science. Some might say (and I’m inclined to agree) that it’s a branch of animal behavior. What’s a theory in the social sciences? Is MPT a theory in that context?

The sociologists Hans Joas and Wolfgang Knobl write,

Theories should be understood as generalizations. To put it the other way around, which may be easier to grasp, we might say: every generalization is already a theory. We use theories of this kind all the time, particularly in everyday life…. The modern social sciences … now feature … a plethora of competing theoretical schools (“What Is Theory?” in Social Theory: Twenty Introductory Lectures [Cambridge University Press, 2009]).

If, in the social sciences, a theory can be just a working hypothesis or set of conjectures, subject to empirical checks and countered by opposing or contradictory theories, then MPT is much better than that. MPT is a network of interrelated propositions, developed to describe a specific aspect of the way the world works, that is supported by enough evidence that well-informed people take it seriously as the starting point for further investigation. It is not “exactly true,” but there is no alternative set of propositions that is “more true” or even “just as true.”

RESPECT THE PARADIGM
And that is where MPT, the list of 10 great ideas shown above, stands. There are competing ideas, but none of them hangs together as an integrated body of theory. Nor do the competing ideas have anything like enough evidence behind them to overturn or replace MPT. Behavioral finance is a start, but I regard it as an enhancement to MPT or, more finely understood, a set of exceptions to a general rule—a list of situations in which MPT gives you only a pretty good answer instead of a great one.

Theoreticians should keep working on alternatives to MPT. But they should give proper respect to the body of knowledge they’re seeking to overturn. Meanwhile, practitioners should continue to pursue alpha. It’s out there. The market is not efficient. But it’s efficient enough that most investors will not beat the market with any consistency after proper adjustment for the risks taken and the explicit and hidden costs incurred. A few will.

Meanwhile, we’ll be building portfolios with an eye to risk, return, and correlation all considered simultaneously, as Harry Markowitz would have us do, albeit with some variations and enhancements. And, dear managers, if circumstances call for us to hire you to manage our assets, we’ll be mindful of the temptation for you to claim that you don’t pay attention to benchmarks and only buy the securities that go up. So, we’ll be measuring you. And we’ll be using CAPM-based techniques, pioneered by William Sharpe, to do so.

Laurence B. Siegel is the Gary P. Brinson Director of Research for the CFA Institute Research Foundation. This article expands on his foreword to the recent CFA Institute Research Foundation monograph Investment Management: A Science to Teach or an Art to Learn, which is available at www.cfapubs.org.